

## Refine Search

### Search Results -

| Terms                     | Documents |
|---------------------------|-----------|
| L4 and (560/\$ or 524/\$) | 6         |

**Database:** US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

**Search:** L5

Refine Search

Recall Text  Clear Interrupt

### Search History

**DATE:** Thursday, August 02, 2007    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

Set Name Query  
side by side

Hit Count Set Name  
result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ*

|           |  |       |           |
|-----------|--|-------|-----------|
| <u>L5</u> | L4 and (560/\$ or 524/\$)                                      | 6     | <u>L5</u> |
| <u>L4</u> | L3 and alcohol and catalyst                                    | 9     | <u>L4</u> |
| <u>L3</u> | L2 and decarboxy\$9  | 9     | <u>L3</u> |
| <u>L2</u> | L1 and (tetrabromophthalic\$7 or tetrabromophthalic anhydride) | 196   | <u>L2</u> |
| <u>L1</u> | tetrabromophthalic ester or diester                            | 62562 | <u>L1</u> |

END OF SEARCH HISTORY

US-CL-CURRENT: 560/103

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMNC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

## □ 3. Document ID: US 7183423 B1

L4: Entry 3 of 9

File: USPT

Feb 27, 2007

US-PAT-NO: 7183423

DOCUMENT-IDENTIFIER: US 7183423 B1

TITLE: Process for the preparation of organic compounds with imide catalysts

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMNC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

## □ 4. Document ID: US 5728760 A

L4: Entry 4 of 9

File: USPT

Mar 17, 1998

US-PAT-NO: 5728760

DOCUMENT-IDENTIFIER: US 5728760 A

TITLE: Use of ring-brominated benzoate compounds as flame retardants and/or plasticizers

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMNC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

## □ 5. Document ID: US 5728323 A

L4: Entry 5 of 9

File: USPT

Mar 17, 1998

US-PAT-NO: 5728323

DOCUMENT-IDENTIFIER: US 5728323 A

TITLE: Process for preparing dialkyl tetrahalophthalates

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMNC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

## □ 6. Document ID: US 5637757 A

L4: Entry 6 of 9

File: USPT

Jun 10, 1997

US-PAT-NO: 5637757

DOCUMENT-IDENTIFIER: US 5637757 A

\*\* See image for Certificate of Correction \*\*

TITLE: One-pot synthesis of ring-brominated benzoate compounds

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KMNC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

## Hit List

|               |       |                     |       |          |           |
|---------------|-------|---------------------|-------|----------|-----------|
| First Hit     | Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs |
| Generate OACS |       |                     |       |          |           |

Search Results - Record(s) 1 through 9 of 9 returned.

1. Document ID: US 20060216619 A1

L4: Entry 1 of 9

File: PGPB

Sep 28, 2006

PGPUB-DOCUMENT-NUMBER: 20060216619

PGPUB-FILING-TYPE:

DOCUMENT-IDENTIFIER: US 20060216619 A1

TITLE: Charge-transporting compound, electrophotographic photoreceptor, image-forming apparatus, and process cartridge

PUBLICATION-DATE: September 28, 2006

INVENTOR-INFORMATION:

| NAME              | CITY     | STATE | COUNTRY |
|-------------------|----------|-------|---------|
| Iwasaki; Masahiro | Kanagawa |       | JP      |
| Nukada; Katsumi   | Kanagawa |       | JP      |
| Yamada; Wataru    | Kanagawa |       | JP      |
| Yao; Kenji        | Kanagawa |       | JP      |

US-CL-CURRENT: 430/58.75; 430/56, 430/58.65, 430/73

|      |       |          |       |        |                |      |           |           |             |        |      |         |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawn D |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

2. Document ID: US 20050027139 A1

L4: Entry 2 of 9

File: PGPB

Feb 3, 2005

PGPUB-DOCUMENT-NUMBER: 20050027139

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050027139 A1

TITLE: Process for producing tetrabromobenzoate esters

PUBLICATION-DATE: February 3, 2005

INVENTOR-INFORMATION:

| NAME                | CITY           | STATE | COUNTRY |
|---------------------|----------------|-------|---------|
| Bartley, David W.   | West Lafayette | IN    | US      |
| Siebecker, James D. | West Lafayette | IN    | US      |
| Falloon, Stephen B. | Lafayette      | IN    | US      |

7. Document ID: US 5208366 A

L4: Entry 7 of 9

File: USPT

May 4, 1993

US-PAT-NO: 5208366

DOCUMENT-IDENTIFIER: US 5208366 A

TITLE: High yield method for preparation of dialkyl esters of polyhaloaromatic acids

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Email](#) | [Claims](#) | [KINIC](#) | [Drawn](#) 8. Document ID: US 5049697 A

L4: Entry 8 of 9

File: USPT

Sep 17, 1991

US-PAT-NO: 5049697

DOCUMENT-IDENTIFIER: US 5049697 A

TITLE: High yield method for preparation of dialkyl esters of polyhaloaromatic acids

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Email](#) | [Claims](#) | [KINIC](#) | [Drawn](#) 9. Document ID: US 3775165 A

L4: Entry 9 of 9

File: USPT

Nov 27, 1973

US-PAT-NO: 3775165

DOCUMENT-IDENTIFIER: US 3775165 A

\*\* See image for Certificate of Correction \*\*

TITLE: POLYMERS OF IMPROVED FLAME RETARDANCE

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Email](#) | [Claims](#) | [KINIC](#) | [Drawn](#)[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

| Terms                       | Documents |
|-----------------------------|-----------|
| L3 and alcohol and catalyst | 9         |

Display Format: [-] [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

on, distribution, copying, or storing  
of this information, without the prior written consent of CAS, is  
strictly prohibited.

FILE COVERS 1907 - 2 Aug 2007 VOL 147 ISS 6  
FILE LAST UPDATED: 1 Aug 2007 (20070801/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> s tetrabromophallic?  
L2 1 TETRABROMOPHALIC?

=> s tetrabromophthalic?  
L3 674 TETRABROMOPHTHALIC?

=> s 13 and ((ester or diester)  
UNMATCHED LEFT PARENTHESIS 'AND ((ESTER'  
The number of right parentheses in a query must be equal to the  
number of left parentheses.

=> s 13 and (ester or diester)  
604022 ESTER  
15979 DIESTER  
L4 117 L3 AND (ESTER OR DIESTER)

=> s 14 and alcohol and catalyst  
266405 ALCOHOL  
770520 CATALYST  
L5 2 L4 AND ALCOHOL AND CATALYST

=> s 15 and py<2003  
22880437 PY<2003  
L6 2 L5 AND PY<2003

=> d 1-2 ibib abs hitstr

L6 ANSWER 1 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2001:352302 HCPLUS  
DOCUMENT NUMBER: 134:353953  
TITLE: Esterification method for the manufacture of  
plasticizers for polymers  
INVENTOR(S): Buono, John A.; Cobb, Maryellen; Tao, Tao T.  
PATENT ASSIGNEE(S): Teknor Apex Company, USA  
SOURCE: U.S., 7 pp., Cont.-in-part of U.S. Ser. No. 199,691,  
abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE        |
|--|------|----------|-----------------|-------------|
| US 6232427   | B1   | 20010515 | US 1999-470613  | 19991222 <- |
| WO 2001046311  | A1   | 20010628 | WO 2000-US34733 | 20001220 <- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,<br>HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,<br>LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,<br>SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,<br>YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |             |

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
PRIORITY APPLN. INFO.: US 1997-67970P P 19971208  
US 1998-199691 B2 19981125  
US 1999-470613 A2 19991222

AB Methods of making halogenated aromatic esters useful as plasticizers are described. Polymer compns. including halogenated aromatic esters are also described. In one embodiment, the method includes contacting a tetrabromophthalate, an alc. and barium acetate.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:535443 HCAPLUS

DOCUMENT NUMBER: 111:135443

TITLE: High yield methods for preparation of dialkyl esters of polyhaloaromatic acids as fire retardants for polymers

INVENTOR(S): Bohem, Joseph Michael; Mancuso, Anthony John

PATENT ASSIGNEE(S): Pennwalt Corp., USA

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE         |
|--|------|----------|-----------------|--------------|
| WO 8902887   | A2   | 19890406 | WO 1988-US3256  | 19880921 <-- |
| WO 8902887   | A3   | 19900322 |                 |              |
| W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU          |      |          |                 |              |
| RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG |      |          |                 |              |
| US 5049697   | A    | 19910917 | US 1988-244421  | 19880916 <-- |
| AU 8827200   | A    | 19890418 | AU 1988-27200   | 19880921 <-- |
| AU 626819  | B2   | 19920813 |                 |              |
| EP 334951  | A1   | 19891004 | EP 1988-910425  | 19880921 <-- |
| EP 334951  | B1   | 19950412 |                 |              |
| R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE  |      |          |                 |              |
| BR 8807209   | A    | 19891017 | BR 1988-7209    | 19880921 <-- |
| ES 2010608   | A6   | 19891116 | ES 1988-2869    | 19880921 <-- |
| JP 02502018  | T    | 19900705 | JP 1988-509511  | 19880921 <-- |
| DD 282449  | A5   | 19900912 | DD 1988-319987  | 19880921 <-- |
| HU 54339   | A2   | 19910228 | HU 1988-6807    | 19880921 <-- |
| CA 1333178   | C    | 19941122 | CA 1988-578019  | 19880921 <-- |
| AT 121069  | T    | 19950415 | AT 1988-910425  | 19880921 <-- |
| NO 8902003   | A    | 19890518 | NO 1989-2003    | 19890518 <-- |
| NO 170147  | B    | 19920609 |                 |              |
| NO 170147  | C    | 19920916 |                 |              |
| FI 8902449   | A    | 19890519 | FI 1989-2449    | 19890519 <-- |
| DK 8902441   | A    | 19890718 | DK 1989-2441    | 19890519 <-- |
| US 5208366   | A    | 19930504 | US 1991-738992  | 19910819 <-- |
| PRIORITY APPLN. INFO.:   |      |          | US 1987-99361   | A 19870921   |
|  |      |          | US 1988-244421  | A 19880916   |
|  |      |          | WO 1988-US3256  | A 19880921   |

AB Title fire retardants are prepared by esterification of polybromo- or polychlorophthalic acid, polybromo- or polychlorobenzoic acids, or polybromo- or polychlorophthalic anhydride with alcs. in the presence of metal or organometallic compound as catalyst. A flame retardant [A; prepared by esterification of 0.5 mol tetrabromophthalic anhydride and 3.0 mol 2-(2-methoxyethoxy)ethanol with 2.32 g stannous

oxalate and 200 mL xylene] 60 was molded with a mixture of PVC 100, dibasic lead phthalate 7, clay 10, bisphenol A 0.3, and wax 0.3 part having oxygen index 56.5 vs. 28.0 for DOP instead of A.